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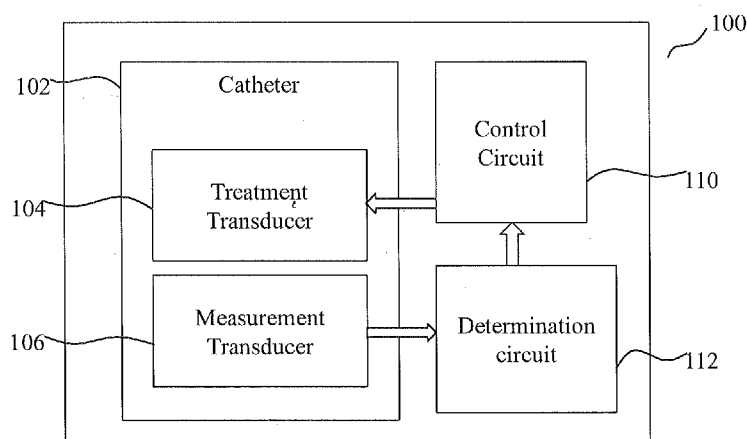


FIG. 1

(57) Abstract: According to various embodiments, there is provided a thrombolysis device including a catheter configured to be inserted into a blood clot; a treatment transducer coupled to the catheter, the treatment transducer configured to transmit acoustic waves; a measurement transducer coupled to the catheter, the measurement transducer configured to transmit further acoustic waves and further configured to receive acoustic echoes, the acoustic echoes being reflections of the further acoustic waves from a boundary of the blood clot, wherein the measurement transducer is further configured to provide a measurement output; a determination circuit configured to determine at least one of a viscosity of blood in a vicinity of the measurement transducer or a volume of the blood clot, based on the measurement output; and a control circuit configured to generate control signals for controlling the treatment transducer, based on at least one from the group consisting of the viscosity of blood in the vicinity of the measurement transducer, the volume of the blood clot and a temperature measurement of the blood clot.